

Remarks/Arguments

Reconsideration of the above-identified application in view of the present amendment is respectfully requested.

Claims 1-5, 7, and 10-12 have been rejected as unpatentable over Misner, US 2002/0164943 in view of Oppermann et al., US 2003/0019527. Claims 13-20 and 22-25 have been allowed. Claims 8 and 9 have been indicated as containing allowable subject matter. Claims 6 and 21 have been canceled without prejudice.

Claim 1 recites each flap having opposite surfaces against which air pressure acts, differential air pressure acting on the opposite surfaces causing the flap to move about a hinge to enable airflow through the central opening, the hinge comprising a narrow portion of material formed between slots in the flap. Misner does not disclose a hinge comprising a narrow portion of material between slots in the flap (Office Action, page 3, para. 3). The Office Action states that it would have been obvious to provide each flap of Misner with a hinge comprising a narrow portion for the purpose of providing quicker relief than possible with an undivided flap (Office Action, page 4, para. 3).

Misner discloses an air exhauster for allowing movement of air through a cabin of a motor vehicle to relieve pressure during an increase of pressure in the cabin (Misner, page 1, para. 3). Oppermann et al. discloses a complex reed valve for controlling intake into an internal combustion engine (Oppermann et al., page 1, para. 1). The reed valve is made from carbon fiber material and has a selective thickness in order to avoid flutter at low engine rpm's (Oppermann et al., page 2, para. 14).

The Office Action states that it would have been obvious to replace each flap of Misner with a plurality of flaps, as disclosed in Oppermann et al., for the purpose of providing quicker relief than possible with an undivided flap (Office Action, page 3, para. 2). Please note that the four petals (72, 74, 76, 78) of Oppermann et al. each correspond to four ports (Fig. 2). The motivation stated in the Office Action does not indicate why one of ordinary skill in the art would replace the single flap of Misner with a divided flap. If modified in this manner, there would be gaps between the flaps and the air exhauster of Misner would no longer seal the interior of the passenger compartment of the vehicle from the environment.

Further, Misner states that the thickness of the hinge regions may be increased or decreased for varying the biasing effect of the hinge regions (page 2, para. 26). Thus, one of ordinary skill in the art would have no need to modify Misner, as suggested by the Office Action, since a mechanism for providing quicker relief is already disclosed by Misner.

Additionally, if a proposed modification would render the prior art reference being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. MPEP §2143.01. The hinges (44a, 44b) of Misner are designed to bias the flaps (40) in an outward direction (Misner, page 2, para. 26). The petals (72, 74, 76, 78) of Oppermann et al. are not biased in any direction. If the air exhauster of Misner were modified to have only narrow hinges, as disclosed by Oppermann et al., the hinges (44a, 44b) would not bias the flaps (40). Furthermore, narrowing the hinges of Misner would create more open

areas for air to flow in both directions and the air exhauster would no longer seal the interior of the passenger compartment of the vehicle from the environment.

Again, as stated above, the reed valve of Oppermann et al. involves small pressure differences and small reed movements affecting the sensitive operational characteristics of the intake to the combustion chamber of the engine. Thus, the air exhauster of Misner would no longer be satisfactory for its intended purpose if modified, as suggested by the Office Action, to include characteristics of a reed valve sensitive to small pressure differences. The flaps of the air exhauster of Misner would be constantly opening and closing, which is undesirable for an air exhauster of this type.

Furthermore, if a proposed modification of the prior art would require a substantial reconstruction and redesign of the primary reference, as well as a change to the basic principle under which the primary reference was designed to operate, then the teachings of the references are not sufficient to render the claims prima facie obvious. §2143.01. Misner, the primary reference, discloses a one-piece molded air exhauster for a car (Misner, para. 22). Oppermann et al. discloses a reed valve with a plurality of relatively thin petals (Fig. 6) for screwing to an internal combustion engine block (Oppermann et al. para. 31-32). Because the air exhauster of Misner has a one-piece construction with relatively thick flaps, the modification proposed by the Office Action would require a substantial reconstruction and redesign for constructing the air exhauster.

Also, in rejecting claim 1 as obvious over Misner in view of Oppermann et al., it is respectfully suggested that improper hindsight has been used. Misner fails to

teach or suggest an air exhauster with flaps having narrowed hinge portions. Thus, without reference to the teachings of the disclosure of the present invention, one of ordinary skill in the art would not have the requisite knowledge to modify Misner with Oppermann et al., a reed valve designed for regulating the small pressure differences of an intake of an internal combustion engine, by utilizing flaps having narrowed hinge portions, as recited in claim 1. According to In Re Sponnoble, 160 USPQ at 243 (CCPA 1969), such hindsight is impermissible.


Claim 1, as well as claims 2-5, 7, and 10-12 which depend from claim 1, are in condition for allowance.

Allowable claim 8 has been amended to stand independently. Claim 8, as well as claim 9 which depends from claim 8, are in condition for allowance.

In view of the foregoing, allowance of the above-identified application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,


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